

White

**Rose
Maths**

Year 5 - Spring - Block 1

Multiplication & Division

Alex calculated $1,432 \times 4$

Here is her answer.

| | Th | H | T | O |
|----------|----|----|----|---|
| | 1 | 4 | 3 | 2 |
| \times | | | | 4 |
| | 4 | 16 | 12 | 8 |

$$1,432 \times 4 = 416,128$$

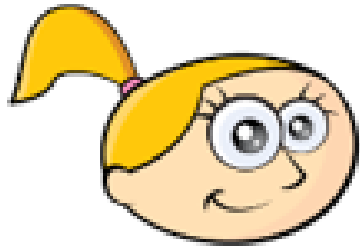
Can you explain what Alex has done wrong?

Can you work out the missing numbers using the clues?

$$\begin{array}{r}
 \square\square\square\square \\
 \times \qquad \qquad \square 5 \\
 \hline
 \square\square\square\square\square
 \end{array}$$

- The 4 digits being multiplied by 5 are consecutive numbers.
- The first 2 digits of the product are the same.
- The fourth and fifth digits of the answer add to make the third.

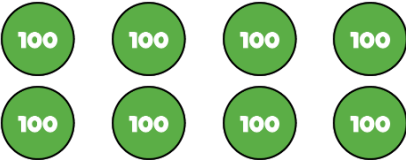
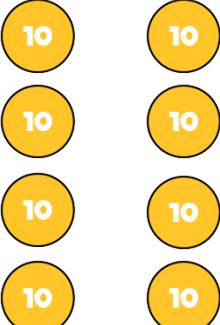
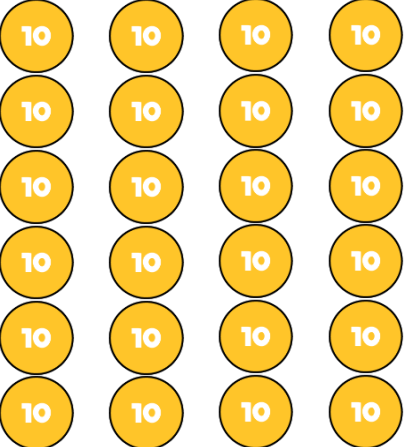
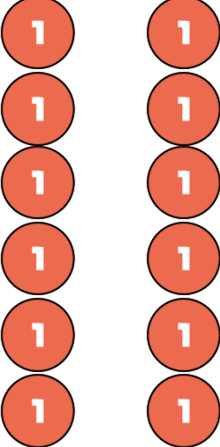
Eva says,



To multiply 23 by 57 I just need to calculate 20×50 and 3×7 and then add the totals.

What mistake has Eva made?
Explain your answer.

Amir hasn't finished his calculation. Complete the missing information and record the calculation with an answer.

| \times | 40 | 2 |
|----------|---|--|
| 40 |  |  |
| 6 |  |  |

Farmer Ron has a field that measures 53 m long and 25 m wide.

Farmer Annie has a field that measures 52 m long and 26 m wide.

Dora thinks that they will have the same area because the numbers have only changed by one digit each.

Do you agree? Prove it.

Tommy says,



It is not possible to make
999 by multiplying two 2-
digit numbers.

Do you agree?
Explain your answer.

Amir has multiplied 47 by 36



| | | | |
|---|---|---|---|
| | | 4 | 7 |
| × | | 3 | 6 |
| | 2 | 8 | 2 |
| | 1 | 4 | 1 |
| | 3 | 2 | 3 |

Alex says,



Amir is wrong because the answer should be 1,692 not 323

Who is correct?

What mistake has been made?

$$22 \times 111 = 2442$$

$$23 \times 111 = 2553$$

$$24 \times 111 = 2664$$

What do you think the answer to 25×111 will be?

What do you notice?

Does this always work?